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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,799	11/20/2001	Sheng-Guo Wang		1612

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Dr. Sheng-Guo Wang
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EXAMINER

HOFFMANN, JOHN M

ART UNIT PAPER NUMBER

1731

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/989,799	Applicant(s) WANG, SHENG-GUO	
	Examiner John Hoffmann	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-22, 24-26, 28, 30-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-22, 24-26, 28, 30-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 26 and 28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 26: there is no support for the new limitation of "double monitoring the changes of the bare fiber diameters". Examiner could find no mention of double monitoring. Whereas Examiner realizes that the fiber is monitored in two locations, there is no indication that any change is doubled monitored.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 21-22, 24-26, 28, 30-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language “robustly”, “robust performance”, “robust diameter-controlled” and “robust quality” are “words of degree” which are imprecise unless a definition or guideline has been set forth in the specification or the term is otherwise well known in the art. See Seattle Box Co. v. Industrial Crating and Packing, Inc., 731 F.2d 818, 826, 221 USPQ 568, 574 (Fed. Cir. 1984). However, there is no evidence in application (nor is Examiner aware of any evidence) that the words “robustly”, “robust performance”, “robust diameter-controlled” and “robust quality” have any art-recognized meaning. Nor is there any guidance or definition in the specification that would allow one of ordinary skill in the art to understand the meaning of the words “robustly”, “robust performance” and “robust quality”. As far as Examiner can tell, Applicant has not referred to any portion of the specification or any evidence to define the scope of these words. Accordingly, it is deemed that one of ordinary skill in this art would not have been apprised of the scope of claims. Therefore, claims 21-22, 24-26, 28, 30-36 are indefinite and fail to meet the requirement of 35 U.S.C. 112, second paragraph.

Claim 26 (last two lines) now requires “double monitoring the changes”. There is no mention of this in the specification, nor could Examiner find definition of the term in the prior art. Lines 6-7 of claim 26 already indicates that the fiber is measured in two locations: thus it is unclear if the “double monitoring” is merely saying what was already required by the claim – or if it means that each measuring step requires double monitoring of each change – because the change at one location would be different from the change at the second location. Or if the claim requires something else

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altogether. Since this is not even mentioned at all in the specification, one of ordinary skill would not be able to tell what is required by the claim.

The term “based on” (claims 22, 24, 25, 26, 28 and 30-34) is indefinite as to its meaning and thus makes the claims indefinite. As argued by Applicant on page 35 of the 5.10.05 response, “Really, the phrase ‘based on’ introduces a specific control law or regulation for a control system and a control process”. It appears that applicant is newly defining the scope of “based on”. Examiner could not find any basis for such a definition in the present specification or the prior art which is commensurate with Applicant’s arguments.

First it is noted that the specification does not clearly set forth an explicit definition, thus Applicant is not acting as lexicographer. *Johnson Worldwide Assocs., Inc. v. Zebco Corp.*, 175 F3d 985, 989 (Fed. Cir.1999).

The specification must clearly set forth the definition explicitly and with reasonable clarity, deliberateness and precision. *Teleflex Inc. v. Ficosa North America Corp.*, 63 USPQ2d 1374, 1381 (fed. Cir. 2002), *Rexnord Corp. v. Laitram Corp.* 60 USPQ2d 1851, 1854 (fed. Cir. 2001) and MPEP 2111.01.

In other words, Applicant cannot now define what is meant by “based on”. Such a definition would have to have been made in the specification when the application is originally filed.

The term “historical measurement data” (Claims 34 and 36) is indefinite as to its meaning. Applicant has argued that “historical measurement data” is really time lead or lag measurement. Examiner could find no support for such a definition/interpretation.

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Applicant has not pointed out the support for such. It is deemed that the record now confusing as to what is meant by the claim language.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). The term “double monitoring” (claim 26, last two lines) is not used in the specification. Since claims are interpreted in light of the specification, the features of the claims must be discussed in the specification, so that one understand what the claims are directed to. Presently, the term “double monitoring” is not utilized in the specification. Therefore, one cannot look to the specification to determine what is meant by the claim language. See also the rejections (above) which refer to the double monitoring.

Response to Arguments

Applicant's arguments filed 5 December 2005 have been fully considered but they are not persuasive.

Applicant requests Examiner to write an allowable claim “pursuant to MPEP 707.07(j) and 7.43.04”. First, Examiner could not locate any “7.43.04” (or 707.43.04 or 743.04 or anything similar thereto) in the MPEP. As to section 707.07(j) – such indicates that an allowable claim be written when it is apparent “that there is patentable subject matter disclosed in the application”. Clearly, Examiner does not see any patentable subject matter in the present application – otherwise Examiner would have

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written an allowable claim in the first Office action – or any other time it became apparent that there is allowable subject matter. There is no apparent allowable subject matter.

The arguments directed to the rejection under 35 USC 103 are moot, since the 35 USC 103 rejections are not maintained.

It is argued by applicant that the terms “robustly”, “robust performance”, “robust diameter-controlled” and “robust quality” have been well frequently used since the late 1980's. The relevance of this not understood. The fact that the terms are used does not diminish the fact that are “words of degree” which are imprecise unless a definition or guideline has been set forth in the specification or the term is otherwise well known in the art. See Seattle Box Co. v. Industrial Crating and Packing, Inc., 731 F.2d 818, 826, 221 USPQ 568, 574 (Fed. Cir. 1984). If Applicant meant to argue that the terms are “well known in the art” – this would be an irrelevant assertion. Evidence is needed to support such an assertion.

From MPEP 2145 Consideration of Applicant's Rebuttal Arguments

I. ARGUMENT DOES NOT REPLACE EVIDENCE WHERE EVIDENCE IS NECESSARY

Attorney argument is not evidence unless it is an admission, in which case, an examiner may use the admission in making a rejection. See MPEP § 2129 and § 2144.03 for a discussion of admissions as prior art.

The arguments of counsel cannot take the place of evidence in the record. In re Schulze, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); In re Geisler, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) (“An assertion of what seems to follow from common experience is just attorney argument and not the kind of factual evidence that is required to rebut a prima facie case of obviousness.”). See MPEP § 716.01(c) for examples of attorney statements which are not evidence and which must be supported by an appropriate affidavit or declaration.

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On page 68, lines 6-7 of the 12-5-2005 response, Applicant argues: "The key and difficulty is what kind of robust performance and robust control, and how to complete it." Examiner agrees completely: this is the basis of the 35 USC 112 (2nd paragraph) rejection. It is impossible for anyone to tell (except for Applicant) what kind of robust performance and robust control the claims are directed to.

See Allen Eng'g Corp. V. Bartell Indus. Inc. 299 F.3d 1336, 1348, 63 USPQ2d 1769, 1775 (Fed. Cir. 2002) (quoting Personalized Media Communications, LLC v. Int'l Trade Comm'n, 161 F.3d 696, 705, 48 USPQ2d 1880, 1888 (Fed. Cir. 1998)) ("In determining whether the claim is sufficiently definite, we must analyze whether "one skilled in the art would understand the bounds of the claim when read in light of the specification.") See also, Exxon Research & Eng'g Co. v. United States, 265 F.3d 1371, 1375, 60 USPQ2d 1272, 1276 (Fed. Cir. 2001) (citation omitted) (patent claims must be "sufficiently precise to permit a potential competitor to determine whether or not he is infringing").

For example, what is the "robust quality" of a fiber. Must there be a deviation of less than 1 micron/kilometer of length? 0.1 micron/km deviation ? 0.01 micron/km ? A potential competitor must be able to determine whether or not he is infringing. Since the present application fails to indicate what is meant by robust, it is impossible to tell whether or not a process is robust.

In other words: the present claim requires the robust-type limitations. A potential competitor would realize that he could copy applicant's invention exactly without infringing – as long as he makes sure that the process is "un-robust". Since the present specification does not indicate how robust the process is, potential competitors cannot determine whether or not he is infringing.

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Since Applicant states that: "The key and difficulty is what kind of robust performance and robust control, and how to complete it", it is deemed that Applicant agrees with Examiner's position that the terms are "words of degree" and thus indefinite.

Applicant further argues on page 68 that claim 21 and paragraphs 0049, 0080, 0083, 0096 of the specification (as well as in previous responses) define what is meant by the terms "robustly", "robust performance", "robust diameter-controlled" and "robust quality". Examiner disagrees; no definitions are in any of those cited portions.

The specification must clearly set forth the definition explicitly and with reasonable clarity, deliberateness and precision. *Teleflex Inc. v. Ficosa North America Corp.*, 63 USPQ2d 1374, 1381 (fed. Cir. 2002), *Rexnord Corp. v. Laitram Corp.* 60 USPQ2d 1851, 1854 (fed. Cir. 2001) and MPEP 2111.01.

There is no indication that any of the portions contain definitions. Paragraphs 0049, 0080, 0083, 0096 set for no definition with clarity, deliberateness or precision.

For example applicant points to 0096 which refers to "optical fiber with better accuracy in its size". But there is no indication as to better than what. Is it better than 0.01 micron/km? Since those paragraphs fail to indicate what the standard is, the rejection is maintained.

Furthermore, there is no deliberateness to those alleged definitions. A deliberate definition is something along the lines of: The term "robust" is herein defined to mean that the fiber has a variation in diameter of no more than 0.01 microns/km. If there are definitions in paragraphs 0049, 0080, 0083, 0096, they are hidden; hidden definitions are not proper.

Most importantly, the arguments fail to point what the purported definition is. Clearly, if applicant cannot clearly point out what the definition is – then neither can anyone else.

As to the term “based on”: it is argued that it an “allowable term”. Examiner is unclear what applicant means by it being “allowable”. Examiner assumes Applicant is arguing that applicant is permitted to use the term. This argument is not convincing – the question is whether or not the term is definite enough so that one can understand what is meant.

It is further argued that the phrase “based on” is commonly used term and is well defined in the common sense. This is not well taken, Applicant is the one who is arguing not to use the commonly-used definition. Applicant has argued that “based on” introduces a specific control law or regulation for a control system and a control process – this is not a commonly used definition. Since applicant is arguing two contradictory things (i.e. that it means the commonly used definition, and then also argues the contradiction that it “introduces a specific control law or regulation for a control system and a control process”) one of ordinary skill would not understand which of the two ways is the proper way to interpret the claims.

Applicant questions Examiner’s statement that a definition would have to have been made at the time of the invention. The point Examiner was trying to make was that: If applicant wishes to create a new definition he must create it at (or before) the

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time the application was filed. He CANNOT create a new definition in the middle of prosecution, so as to overcome the prior art. The fact that Kenmochi, Yoshimura and many other patents uses the term (in the common sense) is completely irrelevant to the question as to how Applicant is using it. One patent can use it to mean one thing, another patent can use it to mean something else, yet another patent could use it to mean something else, etc. One patent could use it to mean "above", another patent could use it to mean "without", etc. Applicants can be their lexicographer – and thus can define the term "based on" to mean whatever they wish. So it is largely irrelevant as to what Kenmochi and Yoshimura mean by "based on". Presently it only matters what Applicant means by "based on".

"While we have held many times that a patentee can act as his own lexicographer to specifically define terms of a claim contrary to their ordinary meaning," in such a situation the written description must clearly redefine a claim term "so as to put a reasonable competitor or one reasonably skilled in the art on notice that the patentee intended to so redefine that claim term."); *Hormone Research Foundation Inc. v. Genentech Inc.*, 904 F.2d 1558, 15 USPQ2d 1039 (Fed. Cir. 1990). Accordingly, when there is more than one definition for a term, it is incumbent upon applicant to make clear which definition is being relied upon to claim the invention. **Until the meaning of a term or phrase used in a claim is clear, a rejection under 35 U.S.C. 112, second paragraph is appropriate.** See *Tex. Digital Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1202, 64 USPQ2d 1812, 1818 (Fed. Cir. 2002).

Thus, since the meaning of the phrase "based on" is not clear, a rejection is appropriate.

Regarding "historical measurement data" Applicant provides arguments at pages 66-67 of the response. These arguments were considered fully by Examiner, but are not convincing. Applicant there argues that 0039 and 0044 from the specification are the time lead or time lag data. Examiner disagrees.

As indicated above, if applicant wants to define the term “historical measurement data, it must be done with “clarity, deliberateness and precision”. *Teleflex Inc. v. Ficosa North America Corp.*, 63 USPQ2d 1374, 1381 (fed. Cir. 2002), *Rexnord Corp. v. Laitram Corp.* 60 USPQ2d 1851, 1854 (fed. Cir. 2001) and MPEP 2111.01. 0039 and 0044 do not set out any definition with deliberateness. Applicant is also reminded that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

Although the claims are not rejected in view of the prior art, such is not to be interpreted as an indication that any of the claims are allowable or could be amended to be allowable. As argued by Applicant on page 20 (and elsewhere) of the 12-5-2005 response, the prior art does not teach “robust” control. Examiner could find no evidence to contradict Applicant’s argument. However, as indicated above, Examiner does not know what is meant by “robust”. Thus, it is possible that Examiner might later determine that the prior art would have inherently result in a robust process – once Applicant demonstrates what is meant by “robust”.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

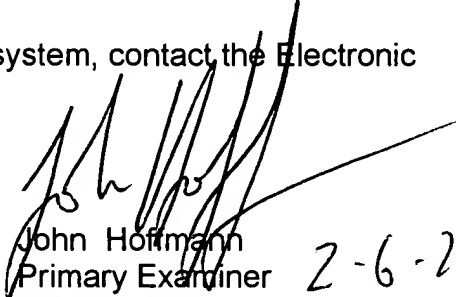
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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John Hoffmann
Primary Examiner
Art Unit 1731

2-6-2006

jmh